UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/317,714	05/24/1999	PETER B. KESSLER	4278	9469

758	7590	10/07/2003

FENWICK & WEST LLP
SILICON VALLEY CENTER
801 CALIFORNIA STREET
MOUNTAIN VIEW, CA 94041

EXAMINER
LAO, SUE X

ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _24 May 1999_ .

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-11,17-22 and 24-41_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _32-35 and 40_ is/are allowed.

6) ☒ Claim(s) _1-7,10,17-20,22,25-31,36-39 and 41_ is/are rejected.

7) ☐ Claim(s) _8,9,11,21 and 24_ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

1.   This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2.   Claims 1-11, 17-22, 24-41 are pending. This action is in response to the preliminary amendment filed 5/24/1999, wherein applicant requested the cancellation of claims 12-16 and 23-43 (page 2) and the addition of claims 44-60. However, as originally filed, the application contains only claims 1-24. Accordingly, claims 12-16 and 23 have been canceled and claims 44-60 have been added and renumbered as claims 25-41 (Rule 1.126).

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-6, 10, 17, 18, 22, 25-30, 36, 37 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over OMG (Interface Repository, OMG TC Document 94-11-7) in view of Nelson et al (U S Pat. 5,577,252).

As to claim 1, OMG teaches a computer system providing type support for multiple type definitions (type checking, page 10, lines 3-4), comprising: an interface repository (interface repository) including: a repository naming context (repository name space, page 14, section 2.5.3, lines 3-4). OMG further teaches naming context (module name space) subordinate to the repository naming context (page 16, lines 7-9) for at least one interface definition language declaration (objects in interface repository correspond to IDL statements). See sections 2.2, page 13, 2nd, 4th para.s.

While OMG manages naming contexts within the repository (module name space, page 16, lines 7-9; contexts, page 37, line 4), OMG does not teach that the naming contexts includes a prefix naming context serving as a root naming context.

Nelson teaches a name context/space (naming services, fig. 5), which includes a subordinate prefix naming context (naming context 'C' in "C/J" for invoking object 'J'), to serve as a root naming context during name resolution (resolve name context 'C', then resolve name 'J' within 'C'). See col. 5, lines 34-45; col. 6, lines 23-58. Therefore, it would have been obvious to include a prefix naming context into the interface repository naming context of OMG. One of ordinary skill in the art would have been motivated to combine the teachings of OMG and Nelson because this would provide secure object access (Nelson, col. 6, line 60 - col. 7, line 44) which, to one of ordinary skill in the art, would have been highly desirable when an ORB has access to multiple interface repositories as in the case of OMG (OMG, page 11, 1st para.).

As to claim 2, OMG teaches at least one naming context (module name space) defined by an interface definition object (interface object). See discussion of claim 1. The combination of OMG and Nelson would have resulted in at least one naming context subordinate to the prefix naming context.

As to claim 3, OMG as modified teaches at least one interface definition object has a fully scoped object name (OMG, scoped name, page 14, sections 2.5.1) including a prefix name of the prefix naming context to which the interface definition object is subordinated (Nelson, see discussion of claim 1).

As to claims 4-6, placing the prefix naming context immediately subordinate to the repository naming context (a root naming context) would have been obvious because each name resolution requires context information. Using a prefix object to define a naming context such as a prefix naming context would have been obvious in view of the fact that each element (repository, modules, interfaces) in the OMG interface repository is implemented with an object. Further, like other typical hierarchical structures, a naming context typically includes leave and non-leave nodes. The same would have been applied to the prefix naming context.

As to claim 10, memory device and processing unit would have been inherent to the system of OMG as modified (Nelson).

As to claims 17, 22, these are method claims of claim 1 and thus note claim 1 for discussion.

As to claim 18, it is a method claim of claim 4 and thus note claim 4 for discussion.

As to claim 25, it is covered by claim 1 except for resolving name collisions and the prefix naming context being adapted to resolve names subordinate to the repository naming context, which are met by OMG (resolve relative to context, page 17, 2nd para.) as modified by Nelson (see discussion of claim 1 with respect to invocation "C/J").

As to claims 26-30, note claims 2-6 for discussions.

As to claim 36, it is covered by claims 25-26, thus note claims 25-26 for discussions.

As to claim 37, note claim 2 for discussion.

As to claim 41, it is a method claim of claim 25 and thus note claim 25 for discussion.

5.   Claims 7, 19, 20, 31, 38, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over OMG in view of Nelson et al as applied to claims 1, 17, 25, 36 and further in view of SOM (SOMobjects Developer Toolkit Users Guide, version 2.0, pages 7-1 to 7-16).

As to claims 7, 31, OMG as modified teaches an interface repository loader (OMG, repository operations/pragmas) that accepts as input parameters a specified interface

definition language file containing at least one interface definition language declaration (OMG, install interface into repositories, page 11, 2nd and last para.s) and installs the at least one interface definition language declaration (OMG, install interface into repositories, page 11, 2nd and last para.s) in a naming context (page 51, sections 3.3.2).

OMG as modified does not teach that the input parameters includes and a specified prefix name.

SOM teaches an interface repository loader (SOM compiler/emitter) which accepts as input parameters an interface declaration and a specified prefix name (c:\myfiles\) such that the interface declaration (newcls.ir) will be installed in the name context indicated by the prefix name (page 7-2, section 7.2). Therefore, it would have been obvious to include into the input parameter the specified prefix name into OMG as modified. In so doing, additional type checking could have been provided with the use of the -u flag of the SOM compiler.

As to claims 19, 20, 38, 39, OMG as modified teaches specifying an interface definition language file containing at least one interface definition language declaration (interface objects, page 14, section 2.5.3); specifying a prefix naming context (SOM, c:\myfiles\, discussion of claim 7); and storing each interface definition language declaration in the specified interface definition language file into the specified prefix naming context (OMG, install interface into repositories, page 11, 2nd and last para.s; SOM, page 7-2, section 7.2). OMG as modified also teaches creating an interface definition object (interface object) for the interface definition language declaration (create definition within repository, page 11, last para.); storing the interface definition object (OMG, install interface into repositories, page 11, 2nd and last para.s) in the specified prefix naming context (name context includes prefix name context, Nelson, discussion of claim 1; SOM, page 7-2, section 7.2); and providing the interface definition object with a fully scoped object name (OMG, scoped names) including a prefix name from the prefix naming context in which the interface definition object is stored (OMG, page 14, section 2.5.1; Nelson, "C/J", discussion of claim 1).
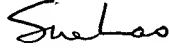
6.   Claims 32-35 and 40 are allowed.

7.   Claims 8, 9, 11, 21 and 24 are objected to as being dependent upon respective rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the respective base claim and any intervening claims.

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (703) 305-9657. A voice mail service is also available at this number. The examiner's supervisor, SPE John Follansbee, can be reached on (703) 305 8498. The examiner can normally be reached on Monday - Friday, from 9AM to 5PM. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7238 for After Final communications, (703) 746-7239 for Official communications and (703) 746-7240 for Non-Official/Draft communications.

   Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Sue Lao
September 29, 2003